AMSAT News Service Weekly Bulletins
Issue: ANS-344
Date: 2017-12-10
Sources: amsat-ans-2017-ans-344-weekly-hyperkitty-8b1124a77a.txt

---

AMSAT NEWS SERVICE
ANS-344

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see:
http://www.amsat.org/mailman/listinfo/ans

In this edition:

* November/December 2017 Apogee View Column Posted on the AMSAT Web
* New Video: AO-91 Integration and Testing Before Launch
* Special Membership Offer Continues for RadFxSat/AO-91 Launch
* Donate to AMSAT Tax-Free From Your IRA
* AMSAT Keplerian Elements Updated with AO-91 NORAD Tracking Number
* New Distance Record via AO-91 5,955 km
* Satellite Activity From Azores Islands on Christmas
* December 20 Launch for HA-1 CubeSat with FM transponder and SSTV
* Information for Requesting UT1FG/MM QSL Cards
* English Edition of AMSAT-EA Newsletter
* New Cuban Movie Features Ham Radio Contact With MIR
* 2017 Open Source Cubesat Workshop Talks Posted On-line
* Spaceflight Prepares to Launch Eleven Spacecraft on India's PSLV-C40
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-344.01
ANS-344 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 344.01
 From AMSAT HQ KENSINGTON, MD.
DATE December 10, 2017
To All RADIO AMATEURS
BID: $ANS-344.01

November/December 2017 Apogee View Column Posted on the AMSAT Web

The November/December 2017 edition of Apogee View, a comprehensive bimonthly update of AMSAT's activities written by AMSAT President Joe Spier, K6WAO, has been posted on the AMSAT website.

https://www.amsat.org/apogeeview/

[ANS thanks Paul Stoetzer, N8HM for the above information]

New Video: AO-91 Integration and Testing Before Launch

AMSAT VP of Engineering, Jerry Buxton, NØJY has released a video report on YouTube, "The Good and the Bad with AO-91". During the 12 minute video Jerry describes what's right and what went a little wrong with AO-91: She hears very well, but she had a heck of a time learning to talk. Watch on-line at: https://youtu.be/no4pHx02lSI

[ANS thanks AMSAT VP of Engineering, Jerry Buxton, NØJY for the above information]

Special Membership Offer Continues for RadFxSat/AO-91 Launch

AO-91 is open to all and works great! Now is a good time to join AMSAT and receive a free digital copy of "Getting Started with Amateur Satellites"!

Visit https://www.amsat.org/product-category/amsat-membership/ and help AMSAT Keep Amateur Radio in Space.

AMSAT is making our "Getting Started With Amateur Satellites" book available for a limited time as a download with any paid new or renewal membership purchased via the AMSAT Store. This offer is only available with purchases completed online, and for only a limited time. A perennial favorite, Getting Started is updated every year with the latest amateur satellite information, and is the premier primer of satellite operation. The 182 page book is presented in PDF format, in full color, and covers all aspects of making your first contacts on a ham radio satellite.

Please take advantage of this offer today by visiting the AMSAT store at https://www.amsat.org/shop/ and selecting any membership option. While there, check out our other items, including the M2 LEOpack antenna system, Arrow antennas, AMSAT shirts, and other swag.

Thank you, and see you soon on AO-91!

[ANS thanks Paul N8HM for the above information]

Donate to AMSAT Tax-Free From Your IRA

Are you over 70-1/2 years of age and need to meet your IRA's Required Minimum Distribution for 2017? Consider making a donation to AMSAT!

Under the Protecting Americans from Tax Hikes Act of 2015, individuals over 70-1/2 years of age may make direct transfers of up to $100,000 per year from a traditional IRA to an eligible charity without increasing their taxable income. Consult your tax advisor or accountant to make certain you are eligible.

AMSAT is a 501(c)(3) not-for-profit educational and scientific organization whose purpose is to design, construct, launch, and operate satellites in space and to provide the support needed to encourage amateurs to utilize these resources. AMSAT's federal tax ID is 52-0888529.

[ANS thanks the AMSAT Board of Directors for the above information]

AMSAT Keplerian Elements Updated with AO-91 NORAD Tracking Number

AMSAT Orbital Elements Manager, Ray Hoad, WA5QGD advises that the AO-91 (FOX-1B) object number has now been updated as NORAD CAT ID 43017 based on the results of detailed orbit analysis by Nico Janssen, PA0DLO. This is expected to be the last change of object number. Ray thanks to all who have labored to finally come to this conclusion. to this point.

The AMSAT Keplerian elements have added AO-91 and EcAMSat (NORAD CAT ID 43019) to the AMSAT-NA TLE distribution.

The following satellites have de-orbited and have been removed from the AMSAT-NA TLE Distribution:

NORAD CAT ID 40949 - GomX-3
NORAD CAT ID 41477 - NODES 1
NORAD CAT ID 41478 - NODES 2
NORAD CAT ID 41931 - TANCREDO
NORAD CAT ID 42770 - INFLATESAIL

Visit http://www.amsat.org/mailman/listinfo/keps to subscribe to weekly e-mail delivery of the AMSAT-NA TLE distribution

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager for the above information]

New Distance Record via AO-91 5,955 km

Satellite operators are continuing to push AO-91's footprint to the limit. Joel Diaz, EB1AO, and Mike Diehl, W8LID, completed a 5,955 km QSO via the satellite this morning. The maximum elevation of the pass was just 0.9° for Mike and the QSO was made at 0.5° on his end. Who will be the first to complete a 6,000 km QSO? The theoretical maximum range is 6,072 km. Visit the AMSAT Distance Record page for a complete list of all satellite records: https://www.amsat.org/satellite-distance-records/

[ANS thanks Paul Stoetzer, N8HM for the above information]

Satellite Activity From Azores Islands on Christmas

Pedro, CU2ZG says he will be active on satellites from grid square HM58 on Christmas.

His equipment will include an Alaskan Arrow antenna, Yaesu FT-817ND, Yaesu FT-857D, Kenwood TS-2000 and a Wouxun KG-UV9DPlus. Most of the operation will be done using the TS-2000.

Expected operating days are December 23 and 24, plus December 25 during the afternoon/evening hours. Pedro says this will be a family holiday and skeds will be accepted depending on his availability. His exact location will be HM58qm, at the CU7BC QTH (check QRZ.com) Watch his twitter account (@pdsousa) for updates.

[ANS thanks Pedro, CU2ZG for the above information]

December 20 Launch for HA-1 CubeSat with FM transponder and SSTV

The IARU has announced frequency coordination has been completed for HA-1, a 2U CubeSat developed by the Teenagers Amateur Radio Center of Activity in Huaian, China. HA-1 is planned for launch on December 20.

HA-1 will be mainly used for teenagers in Huaian to carry out activities related with amateur radio and aerospace science education. The cubesat is equipped with amateur radio repeater and SSTV(Slow Scan Television) component, which is to validate still image transmission in narrowband voice channel.

There is an SSTV beacon, which puts Date/Time/Location information/temperature etc on a SSTV picture. Amateurs worldwide can also use HA-1 to test SSTV via the cubesat.

Uplink: 145.930 MHz FM
Downlink: 436.950 MHz FM
Telemetry: 437.350 MHz 9k6 BPSK

[ANS thanks the IARU for the above information]

Information for Requesting UT1FG/MM QSL Cards

John, K8YSE, posted a message on the amsat-bb on behalf of Yuri, UT1FG/MM currently at sea aboard the MV Seahorse, "Yuri has asked that anyone who has not received confirmations from this year and previous year's operations to prepare logsheets so that he can mail them out when he arrives in New Orleans."

John has posted an Excel Spreadsheet for you to enter your log data plus an example of a completed log sheet at:
http://www.papays.com/sat/ut1fgqsl.html

John's web page includes instructions to prepare your logsheet of QSO's that Yuri can print, verify, sign and mail from one of his destination ports. E-mail your logsheet to John at the address he lists in his instructions. John will send an acknowledgement email when he receives your request. This way you will know that Yuri will have your logsheet.

Marinetraffic.com anticipates a December 15-16 arrival in New Orleans. John requests you send your logsheet QSL request as soon as possible so Yuri will have time to get them ready for mailing.

Yuri's current ship, Seahorse, is a relatively new ship and is wider than previous vessels he has captained so it cannot go through the locks in the Great Lakes. On this voyage he will be more restricted as to possible destinations than he was last season.

John concluded, "Yuri has been very busy with his duties and has had little time for anything else. He sends his regards to all."

[ANS thanks John Papay, K8YSE for the above information]

English Edition of AMSAT-EA Newsletter

Spain's amateur satellite group AMSAT-EA have released an English language edition of their December newsletter

It covers the recently launched RADFXSAT (FOX-1B) FM transponder
CubeSat and the HA-1 FM / SSTV CubeSat due to launch in December.
There is an article on the satellite tracking software Orbitron
and Robert KE4AL describes his experiences operating satellites
during a DXpedition to St. Croix, U.S. Virgin Island.

The translation was made by Fernando EC1AME.

Download the newsletter from
http://tinyurl.com/ANS-344-AMSATEA-News

AMSAT-EA
https://www.amsat-ea.org/
https://twitter.com/AmsatSpain

[ANS thanks Southgate and AMSAT-EA for the above information]

New Cuban Movie Features Ham Radio Contact With MIR

The Havana, Cuba Film Festival begins on December 7. One of the movies
features a cuban amateur radio operator talking to the MIR space
station.

Posted on tiff.net: "As the Soviet Union crumbles in 1991, an amateur
radio operator in Cuba makes unexpected contact with stranded cosmo-
naut Sergei Krikalev as he observes the dissolution of his nation
from orbit, in Cuban director Ernesto Daranas Serrano's comedic yet
poignant reflection on how big events can impact ordinary lives."

Check the videos and pictures here (google translation available
on the site) http://ea1uro.com/radio/peliculacubana/

[ANS thanks the Southgate Amateur Radio News site for the above information]

2017 Open Source Cubesat Workshop Talks Posted On-line

The Open Source Cubesat Workshop which was held on November 23-24 at
the European Space Operations Center (ESOC/ESA), Darmstadt, Germany
co-organized by Libre Space Foundation, the Librecube initiative and
ESA/ESOC Cybernetics Team (https://oscw.space) have posted a YouTube
playlist of the presentations and talks at:
http://tinyurl.com/ANS-344OpenSourceCubesat

[ANS thanks the Libre Space Foundation for the above information]

Spaceflight Prepares to Launch Eleven Spacecraft on India's PSLV-C40

by SpaceDaily.com Staff Writers
Seattle WA (SPX) Dec 05, 2017

http://www.spacedaily.com/reports/Spaceflight_Prepares_to_Launch_
Eleven_Spacecraft_on_Indias_PSLV_C40_999.html

http://tinyurl.com/ANS-344-SpaceflightPSLVLaunch

Spaceflight, a satellite rideshare and mission management provider,
has announced it will be launching 11 spacecraft in early January

from India's Polar Satellite Launch Vehicle (PSLV). Spacecraft include Finland's ICEYE-X1 SAR microsatellite, Planetary Resources' Arkyd-6 6U asteroid prospecting demonstration cubesat, four Spire Global Lemur-2 cubesats, Astro Digital's Landmapper-BC3, AMSAT's Fox-1D cubesat, and others.

Spaceflight performed the cubesat integration at its Seattle Integration Facility and is in the process of shipping the spacecraft to India for the PSLV-C40 mission. The PSLV rocket is scheduled to lift off from India's Satish Dhawan Space Center in early January 2018 with the Cartosat-2ER navigation satellite, in addition to Spaceflight's rideshare customers.

"PSLV-C40 is a perfect example of how our flexible, full-service rideshare model is enabling new commercial space businesses to exist while expanding into new markets," said Curt Blake, president of Spaceflight. "This mission brings new customers from outside the industry into space while continuing partnerships with existing customers for their ongoing satellite constellations."

One first-time customer on the mission is Finland's ICEYE with the country's first commercial satellite, ICEYE-X1. ICEYE developed its own synthetic-aperture radar (SAR) sensor technologies suitable for satellites under 100kg in weight, making it one of the bigger payloads on the PSLV-C40 mission.

This is ICEYE's first proof-of-concept microsatellite mission with a SAR sensor as its payload and also the world's first SAR satellite in this size, enabling radar imaging of the Earth through clouds and even in total darkness. Potential use-cases for the data are monitoring sea ice movements or marine oil spills, and prevention of illegal fishing.

"Working together with Spaceflight to schedule and make this launch a reality has been an outstanding experience for ICEYE, and it has given us the necessary opportunities for scaling up operations for our constellation of micro-SAR satellites as planned," said Rafal Modrzewski, CEO and co-founder at ICEYE.

Spaceflight offers customers the most options for getting to space, working with nearly every global launch vehicle provider, including the Falcon 9, PSLV, Antares, Cygnus, Electron, Soyuz and others.

Much like buying an airline ticket that is valid on multiple airlines, Spaceflight can ensure organizations have flexibility to move vehicles if changes or delays occur. Additionally, the smallsat rideshare service model helps organizations reach a desired orbit at a much lower cost than buying their own launch vehicle.

Spaceflight has negotiated the launch of more than 120 satellites on behalf of its customers and has contracts to deploy nearly 200 more through 2018. The company plans to coordinate and deploy its largest launch to date in 2018 with its first dedicated rideshare mission aboard a SpaceX Falcon 9.

[ANS thanks SpaceDaily.com for the above information]

Satellite Shorts From All Over

+ Did you know you can help AMSAT by logging into your Amazon account using http://smile.amazon.com/ch/52-0888529 to designate AMSAT-NA as the organization of your choice. When shopping on-line

you must use the URL http://smile.amazon.com for AMSAT to receive the donation from your purchases.

+ 2017: FUNcube Status and New Developments - Wouter Weggelaar, PA3WEG walks us through the whole FUNcube family of spacecraft at the AMSAT-UK International Space Colloquium in Milton Keynes, October 15th 2017. Watch on-line at: https://www.youtube.com/watch?v=ELFoLtm44Kc&feature=share

+ While waiting for the next satellite pass have a listen at http://www.livemeteors.com/ to hear meteor pings as they happen. The pings are a bit more frequent during the popular meteor showers.

+ Hackaday posted an article showing how to build your own azimuth-elevation rotor: http://tinyurl.com/ANS-344-HackadayRotor (via Bernhard, VA6BMJ)

+ Wyatt, AC0RA plans to be active from the Carnival Sunshine cruise between December 9-16. He will use the callsign C6AWD/MM. He will operate in semiduplex mode with his FT817 and Arrow antenna. More info at the callsign listing for C6AWD on qrz.com

+ The 3Y0Z DXpedition Team on Bouvet Island is asking the amateur radio community to help with flying costs. See the details on the web: http://www.bouvetdx.org/news-and-updates/

+ European Space Agency astronaut Paolo Nespoli, IZØJPA, is compiling TimeLapseADay videos and is sharing them on-line. These can be found on his playlist posted on YouTube: http://tinyurl.com/ANS-344TimeLapseADay

+ The December 2017 issue of SatMagazine has been posted at: http://www.satmagazine.com/ Vytenis Buzas LY1ZY features in this issue, see pages 76-77.

+ Read about new analysis of the famous Hubble Deep Field images and watch a video scan across the Deep Field. Each of those blobs and dots is a galaxy. See: http://tinyurl.com/ANS-344-UniverseToday

---

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information. And, with that consider that bowling is more advantageous than golf since you rarely lose a bowling ball.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
k9jkm at amsat dot org